

# COWICHAN BAY

## Official Settlement Plan (Background Information)



**COWICHAN BAY  
OFFICIAL SETTLEMENT PLAN**

BACKGROUND REPORT



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COWICHAN BAY OFFICIAL SETTLEMENT PLAN  
BACKGROUND INFORMATION

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## FOREWORD

This document is intended to support and accompany the Cowichan Bay Official Settlement Plan which is an official settlement plan adopted under the auspices of the Municipal Act of the Province of British Columbia. Although not a part of the Settlement Plan By-law, this background information should be referred to by those using the Settlement Plan since it provides a more complete understanding of the rationale behind the Settlement Plan.

Corfield operated the farm until his death in 1928. Two years later the firm of Fred J. James and Brothers of Saltspring Island bought it with money borrowed from S.F. Tolmie's provincial government and developed a seed farm. After only a few years the venture fell into financial difficulty. The government repossessed the farm in the mid 1930's and leased it to Buckerfields Ltd., who continued the operation until 1947. The next owner was E.L. Robson of Riverside Farms, Cowichan Station, who, at first, grew peas and potatoes, then switched to beef cattle. Robson also opened a slaughterhouse and a butcher shop. The latter still does a thriving business.

Robson sold the farm in the mid-1960's to Henry Routell, who, in turn, sold it to N.B. Dinsdale in 1971. Now the 50.6 hectare (125 acre) 'Annsdale Angus Farm' is home for one of the finest prize-winning black angus herds in the province.

The natives of the area also took part in the agricultural development of the area. Families in the Cowichan Band were given title to portion of the reserve so they could develop the property as they saw fit. Prior to the turn of the century, they began clearing parcels of reserve land. Many families worked the land themselves, while others rented out the land to market gardeners (mainly Chinese settlers) and to area farmers for hay. Through a series of grants in 1969 and 1972 to 1975, the Cowichans have assembled and now operate the largest market garden on Vancouver Island, though some families still rent out their property for hay production.

## Fisheries

The Cowichan and Koksilah Rivers have long been known for their abundant fish populations. The natives established their communities around the Cowichan estuary, the bay and on land adjacent the lower reaches of the rivers. From these locations where the rivers slow as they meet the sea, it was relatively easy to construct weirs to trap and spear the spawning salmon. Also, oysters and clams were abundant in the bay, adding to the variety of marine food harvested.

The settlers, too, supplemented their diet with fish. Giovanni Ordano was likely the first "commercial" fisherman to split, dry and ship his catch from the Cowichan area. At least one early pioneer, James Mearns of Cowichan Station, packed herring for export between 1862 and 1872 to supplement his income while in the process of clearing his farm. One fish drying plant, in approximately the same location occupied by the Cowichan Bay Fish Factory today, was operated by Domingo Silvey, a Portuguese settler known as "Domingo the Fisherman." He sold fish locally and to merchants in Victoria and Vancouver. At the turn of the century, salmon sold for just three cents each, except coho, which were thrown back because they were considered too dry to eat.

Commercial fishermen prospered in the Bay, catching great quantities of fish. However, by 1900, there was such a concern for the fisheries, that local residents, including the native Indians and sportsmen, petitioned the provincial government to ban commercial fishing operations inside Separation Point. On June 4, 1902, a Dominion Order-in-Council ruled that, "fishing by means of nets of any kind of description is prohibited in the waters of the estuary of the Cowichan river, including Cowichan Bay, within an imaginary line falling from Serpentine Point to Cowichan Head."

Shortly after white settlers were established, sportsmen discovered the pleasures of angling in the Bay, and the two river systems. The Cowichan Valley gained a world wide reputation as a premier sports fishing area in the early 1900's. Articles acclaiming it as a sports fisherman's haven appeared in North American and English magazines, including the Illustrated London News, World Wide and the Tattler. The Cowichan River was considered one of the best fishing rivers in the world. Hotels and resorts sprung up at the Bay and in Duncan to accomodate the influx of sportsmen. The Cowichan Bay Inn, built in about 1928, and the Buena Vista Hotel, established in 1905, remained the main headquarters for visiting anglers throughout the thirties and forties.

Though the era of the international angler has passed, Cowichan Bay still attracts sportsmen. The improving economy following World War II made owning a car, and a boat, possible for many more families. The increase in vacation time also allowed more North Americans to travel. Cowichan Bay remains as a destination for sports fishermen from throughout Canada and the United States, especially during its famous fishing derby, which started in the late 1950's. The opening of the Inn at Cowichan Bay in the fall of 1981 is a strong indication that the area will continue to attract tourists.

#### Forestry Development

The first white settlers in Cowichan Bay cleared the land for their farms by cutting or burning the forest. Though some timber was used to construct local buildings, most settlers did not recognize the wealth that surrounded them in the forest.

It was not until January, 1879, that the first timber lease, 7,069 acres near Cowichan Lake, was granted to William J. Sutton. As part of the agreement, Sutton was required to build a mill at Genoa Bay. The Cowichan Indians objected strongly to the mill, claiming it was being constructed on their land. Finally, Sutton secured the Genoa Bay enclave by paying the natives with a two-wheeled dumpcart.

By 1924, the Genoa Bay mill remained the only large timber operation in the Cowichan Bay area. Records indicate the mill cut 125,000 board feet daily. The following note in the Cowichan Leader dated 21 February, 1924, was typical of the day:

Shipments during the week included one CPR barge and one CNR barge with 400,000 feet of lumber for prairie and U.S. points.

"A scow load of 160,000 feet went forward to Vancouver for transshipment by the S.S. Canadian Traveller to Australia and a scow load was delivered to Gabriola Island.

"The usual weekly delivery of logs amounting to 600,000 feet was made from Crofton.

By 1925, the Tidewater Subdivision of the Canadian National Railway was extended down to the Bay from Deerholme. It provided inland logging operations, including the Youbou mill, with direct coastal access. The Cameron Lumber Company used the railway to deliver logs to Genoa Bay until the mill ceased operation in 1927.

Also, in 1925, Captain Fred McFarlane organized the Cowichan Bay Booming Association and towed log booms from the Bay to other mill locations on the coast. During the same year, the CN car barge "Canora" started serving the Bay. It remained a fixture on the Cowichan Bay-Port Mann run until 1968.

During the 1930's and 1940's, log dumps were established along the Cowichan Bay Road. Over the years, the users have included the Taylor Brothers, Harry Mattin, George Whittaker, the Bomford Brothers, Bob Wilkinson, Harold Shaw and Rob Colvin. Log

assembly continued to be an important activity even throughout World War II when between forty and fifty sections of logs were removed from the Bay.

Presently, only two operating log dumps remain. One at Westcan is operated by MacMillan Bloedel, the other, along the Cowichan Bay Road, is operated by British Columbia Forest Products.

In 1936, the James Brothers operated a small sawmill adjacent to the Koksilah River in conjunction with their farm operations. It was eventually moved to a site near the present Doman mill and operated under the name of Goldstream Logging. Slegg Forest Products acquired the mill in about 1970 and also constructed a larger mill. Then Doman Industries purchased the land and erected a modern mill, which has been operating since January, 1976.

The Westcan Terminals facility is a recent addition to industry in Cowichan Bay, coming into existence in the mid-sixties when Canadian National abandoned its line into Victoria. Since then, it has been used largely as an assembly area, especially for the shipment of lumber offshore. Westcan leases the property from CN, who own Crown-granted Water Lot No. 160, a 731-acre intertidal estuarian area, excluding the river channels.

#### Community Development

Initially, community development within the study area was slow. White settlers trickled in while the native population declined sharply because of disease.

Since its discovery, Cowichan Bay has served as the gateway to the Valley. The extensive web of river branches through the Flats blocked any direct land route between the coastal settlements of Tzouhalem, Cowichan Harbour and Koksilah. All transpor-

tation was conducted by boat or canoe. In 1865, Samuel Harris built the John Bull Inn with a 300-foot wharf "for the convenience of the public settlers and steamers running to Cowichan Bay." The Inn was located at the foot of Buena Vista Hill, where the Black Douglas Neighbourhood Pub now stands.

Today, the Cowichan Bay waterfront continues to cater to anglers and other tourists. However, a large permanent population has now settled atop Buena Vista Hill.

Koksilah also developed into an important settlement with a school, stores, a post office, and a railway stop on the E & N. Today, a significant commercial district serves the local residents in the region and the public travelling the Island Highway.

Settlements within the study area continue to grow though at a lower rate than experienced in the 1970's. The region's mild climate and its many recreational and scenic amenities are particularly attractive to retired persons from other parts of Western Canada. New homes are being constructed at Koksilah, Clemclemaluts and Comiaken. Services, such as community sewer and water systems, have been upgraded during the past seven years. The settlement areas along Khenipsen Road and at Genoa Bay have not expanded notably because of their location on the rugged coastline at the base of Mount Tzouhalem.

The waterfront and estuary area attract many forms of recreation in addition to sports fishing, such as canoeing and nature studies. Photographers and naturalists find the Bay area very inspiring. The South Cowichan Lawn Tennis Club, the second oldest lawn tennis club in the world, has been operating for almost 100 years.

For the touring public, Cowichan Bay and Tzouhalem Roads provide scenic routes along the coast. From these roads, many historic features can be seen including Robert Service Wayside Park, the "Butter Church" on Comiaken Hill and the giant Western Maple trees on Dinsdale farm.

(b) Climate

The Cowichan Bay area, like most of the eastern seaboard of the Regional District, experiences a transitional mediterranean /maritime climate, characterized by warm, dry summers and mild winters. The area has a July mean maximum of 22.2° C and a January mean minimum of 2.2° C. There is a slight micro-climate change depending upon the proximity to the coastal zone and elevation.

As with the rest of the eastern seaboard, Cowichan Bay is within the rain shadow of the Insular Mountains. The area receives only 96.1 cm of precipitation. It is of interest to note that some areas on the east-facing slopes above Genoa Bay are so dry that native cactus exist. The climatic data for the area is provided in Table I.

There is little doubt that Cowichan Bay has one of the finest climates in Canada and it is because of this that a great many people, especially from out of province, continue to settle in the area. The generally rural character of the area, access to the finest ocean boating area in the country, and proximity to a variety of commercial and cultural services are additional factors which attract individuals to settle in the Bay area.

T A B L E I

SELECTED CLIMATE DATA

COWICHAN BAY

TEMPERATURE

Mean Daily Temperature - Annual	9.6° C
Mean Daily Temperature - January	2.2° C
Mean Daily Temperature - July	17.3° C
July Mean Maximum Temperature	22.2° C
July Mean Minimum Temperature	12.5° C
Extreme Maximum Temperature	35.6° C
Extreme Minimum Temperature	- 6.1° C

PRECIPITATION

Mean Annual Total Precipitation	96.1 cm
Mean Annual Rainfall	90.6 cm
Mean Annual Snowfall	5.7 cm
Annual Number of days with frost	54
Frost Free Period - April 6th - November 11th	
Average Annual Hours of Bright Sunlight	1803 hours

(c) Physical Geography

Geological History

As with the majority of the populated areas of the Regional District, the study area lies within the Georgia Depression, a trench which parallels the Cordilleran Chain through British Columbia and Alaska. The Georgia Depression was formed by major earth crust movements and the erosional activities of the last ice age. Much of the Georgia Depression is submerged below the Strait of Georgia, but where it surfaces on Vancouver Island, it is known as the Nanaimo Lowlands.

The majority of the study area, including that portion extending south of the Cowichan Bay Village and the area extending from the estuary west to Koksilah is within the lowlands. The two portions that are not in this particular geographic micro-area are the Mount Tzouhalem-Skinner Bluff area and Grouse Hill. Both are very prominent mountainous land features and are actually the lower eastern extremities of the Insular Mountains.

The last ice sheet to pass through this area is referred to as the Cowichan Ice Tongue. Its advance down the Cowichan Valley was deflected south-east with Mt. Tzouhalem and the mountain range on Saltspring Island forming the northern limit. The melt waters from the retreating ice sheet caused much of the lower lands within the study area to be covered by marine water, which upon retreating, left behind extensive deposits of marine soils.

General Topography

Due to the diversity of the study area, specific statements will be required for individual locations such as the estuary, uplands and mountain areas.

Area 1 - Cowichan Koksilah Floodplain and Estuary

This area extends from the Trans Canada Highway seaward to the intertidal zone. It is a very low area with a maximum elevation of only ten metres near the Koksilah settlement. The total area, which includes a very large portion of land belonging to the Cowichan Indian Band, is 1,517 hectares.

Area 2 - South Shore of Cowichan Bay

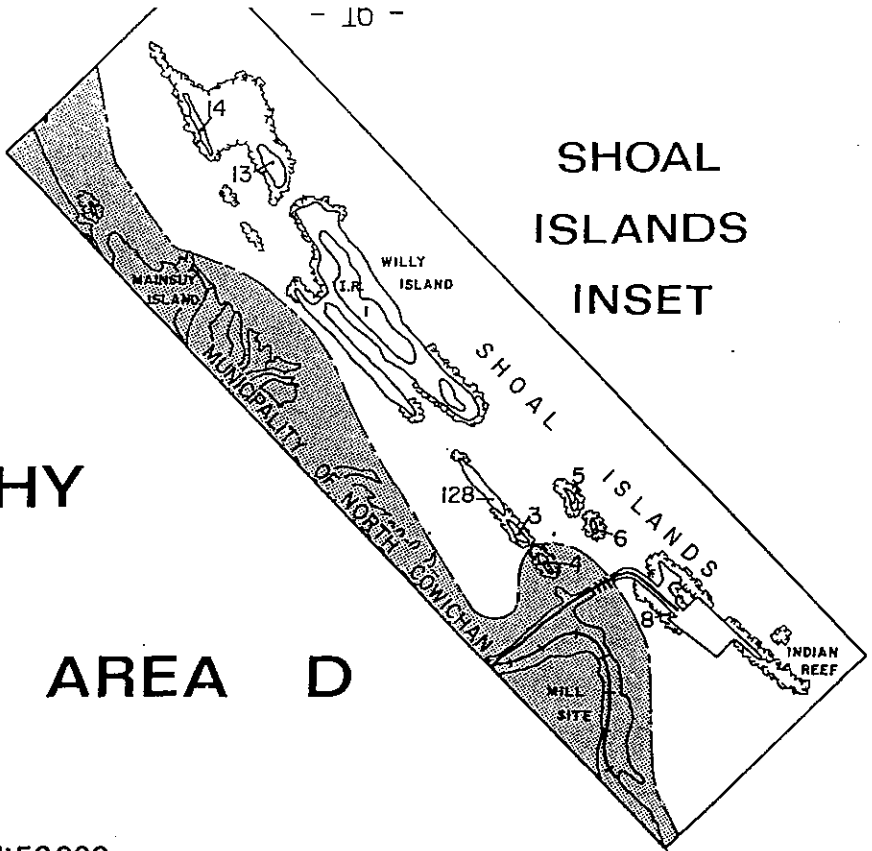
This land includes the area south of the Koksilah River and Cowichan Bay which is under both residential and commercial development, as well as land within the Agricultural Land Reserve. The area consists of a relatively narrow coastal shelf along the Village waterfront and rising to a height of about 60 metres in the residential area of Cowichan Bay and north of Cherry Point Road, and approximately 90 metres above sea level south of Cherry Point-Old Koksilah Road.

Most slopes within the designated agricultural areas are moderate, however, there are definite and dramatic cliffs rising from the coastal shelf. There are a number of deep ravines or "chines" throughout the bench lands covered with thick bush growth. The western portion of the cliff is much lower than in the east, the latter only rising about ten metres above Cowichan Bay Road. Many of the chines do not carry surface water year round although certain creeks, such as Graham Creek flowing down the ravine adjacent Wessex Road, is fairly significant.

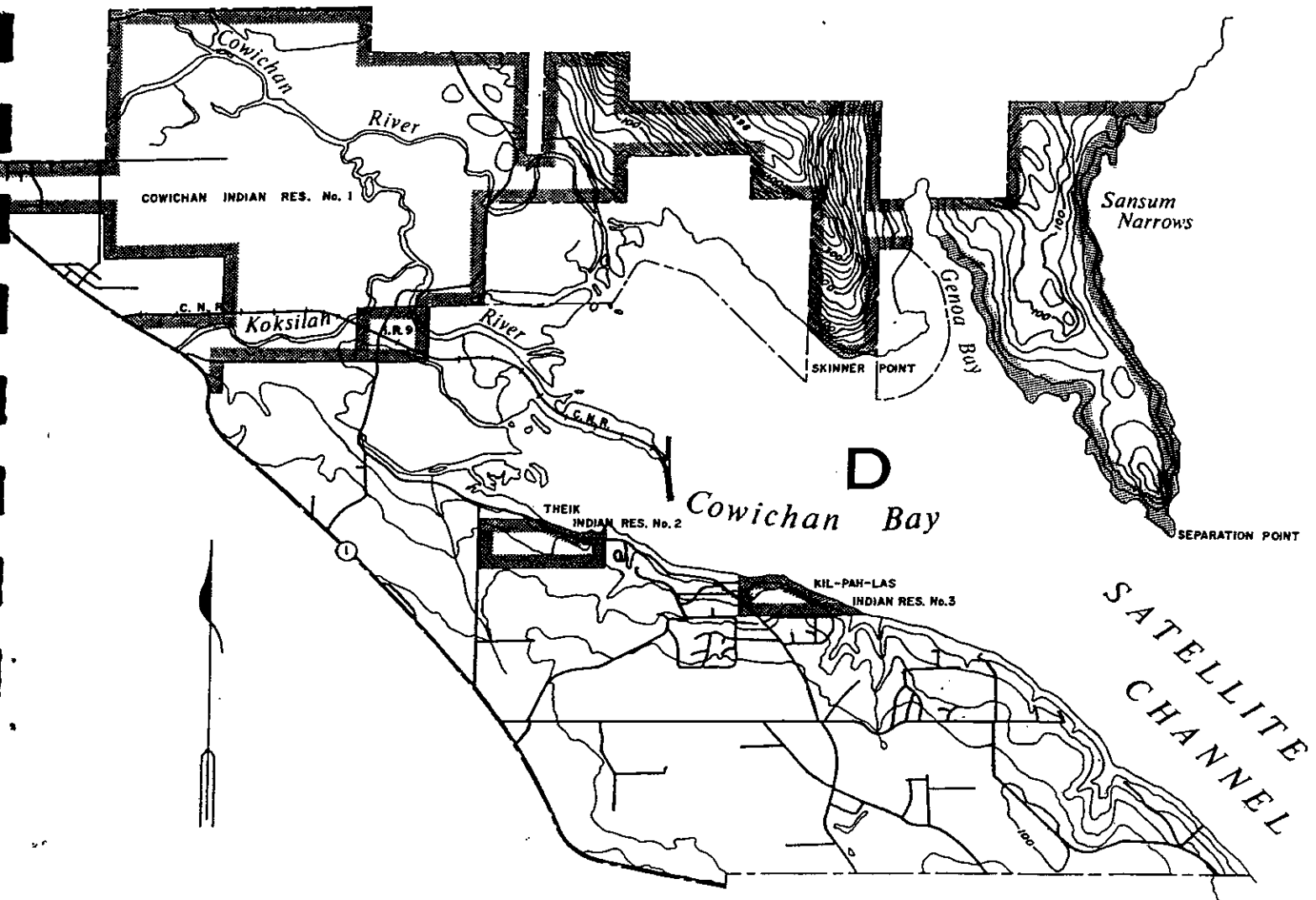
Area 3 - Mount Tzouhalem/Grouse Hill

This is a significant mountainous portion of the study area. Mount Tzouhalem rises very abruptly from Cowichan Bay to a height of approximately 500 metres within the Cowichan Reserve. Within this area, only thin strips of land adjacent to the coast or small enclaves such as Genoa Bay are useable for residential

# TOPOGRAPHY of ELECTORAL AREA D



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development. A similar mountainous condition occurs from Grouse Hill, at an elevation of 150 metres above sea level down to Separation Point.

Area 4 - The Shoal Islands

This is a small group of islands on the outer edge of the Chemainus River estuary. They are largely undeveloped and most of the area is Indian Reserve land. The southern most islands have been consolidated into a dry land log storage area accessible from the Crofton Road by a causeway and bridge.

## Vegetation

The study area is situated within the Strait of Georgia vegetation zone of the Coastal Forest Region. A wide range of tree species grow within the area, including Douglas fir, western red cedar, Garry oak, dogwood, arbutus, hemlock, red alder and broadleaf maple. Shrubs, such as salal, Oregon grape, wild rose and trailing blackberry are widespread on the uplands and through the chines.

Within the estuary area, there are sixteen emergent plant communities occupying about 71 hectares. These include Lyngbyes sedge, Baltic rush, saltgrass, couch grass, and Canada thistle communities. Lyngbyes sedge is of particular importance to fisheries as the decomposing sedges are ingested by amphipods and other marsh invertebrates which are in turn eaten by juvenile salmon.

While emergent vegetation is concentrated on the upper and mid-intertidal areas of the Cowichan estuary, the lower intertidal area supports green and red/brown algae and certain amounts of eelgrass. The eelgrass is most important for young herring and crabs, as well as other benthic species.

Because of the very complex nature of the area, with many micro-climatic areas, variety of terrain and so forth, more detailed accounts of the vegetation of the study area may be found in the Cowichan Estuary Task Force Report and the Natural History of the Cowichan Valley.

## Hydrology

There are two major rivers but no lakes located within the study area. The Cowichan and Koksilah Rivers both terminate at the estuary and because of the nature of the area, a very important freshwater groundwater resource is located under this floodplain.

High flows for both rivers occur in December and January. The average monthly discharge for the Cowichan in December is 120 m<sup>3</sup>/sec. and in January about 102 m<sup>3</sup>/sec., while the maximum discharge can be as much as 558 m<sup>3</sup> sec. which occurred in 1961. Low flows usually occur in August and are in the neighbourhood of 6.94 m<sup>3</sup>/sec., although the average annual daily discharge is approximately 53.1 m<sup>3</sup>/sec.

The Koksilah River, unlike the Cowichan which has a headwater lake, is subject to flash floods, sedimentation problems and extreme summer low flows. Again, the highest flows occur in December (20 m<sup>3</sup>/sec.) and January (24 m<sup>3</sup>/sec.), however maximum daily discharge can be as much as 212 m<sup>3</sup>/sec. In comparison, summer low flows have been as little as 0.057 m<sup>3</sup>/sec., but usually averages 0.450 m<sup>3</sup>/sec.

Both rivers overflow their water courses during winter storms and in fact, major flooding within the whole area from the Trans Canada Highway to the estuary is a regular annual occurrence. Extreme flooding problems occur when a southeast storm "pushes" water into the estuary during the December high tides, backing up the river water. This is so severe at times that Somenos Creek, which enters the Cowichan River, has been know to flow backwards, flooding areas on the east side of the City of Duncan. The whole floodplain area is marked by "ghost channels" and meandering watercourses from both rivers splitting as they reach the sea. Detailed floodplain maps of this area have been prepared by the Ministry of Environment and these clearly indicate areas of high risk.